



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: SUTHERLAND, Stephen, B.; WICK, Dale, M.
Serial No.: 10/067,962
Filed: February 8, 2002
Title: CONTROLLED ACCESS SYSTEM FOR ONLINE COMMUNITIES
Group: 2154
Examiner: LIN, Kenny S.
Attorney Ref.: PAT 998-2 US

AFFIDAVIT UNDER 37 CFR 1.131

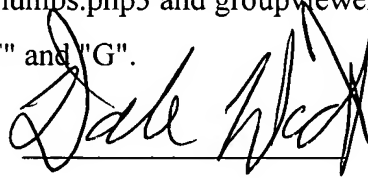
We, Stephen B. Sutherland and Dale M. Wick being duly sworn, depose and state:

1. We are the co-inventors of claims 9 to 11 of the above-mentioned patent application.
2. Claim 9 recites a photosharing wide area computer network comprising a web server storing digital images associated with particular users and allowing each particular user to authorize others to access the digital images of the particular user, said web server providing each user with an invitation procedure for inviting others to access the images controlled by the user, said invitation procedure including creating an invitation which includes an authorization segment and forwarding the invitation electronically to a designated invitee at a particular address, said designated invitee using said invitation to contact the web server and provide access to said images controlled by the user in accordance with said authorization segment. Claims 10 and 11 specify that the invitations are sent over the Internet, and that, on contacting the web server, users are given a listing of photo albums they have authorization to share, respectively.
3. The invention, as described and claimed in the subject application, was completed, prior to March 17, 2000, in Canada, which is both a NAFTA country and a WTO country, as established by the following:

- (a) At least as early as July 29, 1999, Mr. Sutherland met with David Gurney, a recognized industry expert and a contractor to Canada Post Corporation

("Canada Post"), to discuss partnering opportunities between OpenGraphics Corporation ("OpenGraphics"), the predecessor of the present assignee, and Canada Post in the development of the Electronic Post Office ("EPO").

- (b) OpenGraphics employed both Mr. Sutherland and Mr. Wick, and all product development was carried out in Toronto, Ontario, Canada.
- (c) On July 30, 1999, Mr. Sutherland sent an email, attached hereto as Exhibit "A", to Mr. Gurney, attaching a document entitled "Discussion Notes - EPO Website Concepts" ("Discussion Notes"), dated July 30, 1999, attached hereto as Exhibit "B". At Section 3 b) of the Discussion Notes, the concept of sharing images among closed groups is clearly described.
- (d) At least as early as August 10, 1999, the sharing of images within specified groups was implemented in the pixBank site, developed by OpenGraphics. A snapshot of the pixBank site, dated August 10, 1999, is attached hereto as Exhibit "C". The website snapshot includes files, in PHP script, that implement the group photosharing feature, as claimed. These files, named groupfolder.php3, grpimage.php3, grpthumbs.php3 and groupviewer.php3, are attached hereto as Exhibits "D", "E", "F" and "G".

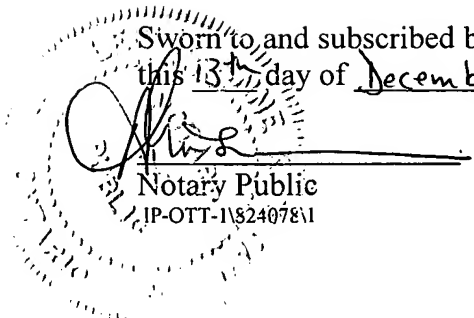


Dale M. Wick



Stephen B. Sutherland

Sworn to and subscribed before me
this 13th day of December, 2005.



Notary Public
IP-OTT-11824078\1



**THIS IS EXHIBIT "A" TO THE
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SWORN THIS 13TH DAY OF DECEMBER, 2005**

A handwritten signature in cursive script, appearing to read "Ali S.", written over a horizontal line.

**A Notary Public or Commissioner
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Kinsman, Anne

To: ssutherland@siberra.com
Subject: RE: OpenGraphics/EPO Discussion Notes
Sensitivity: Confidential

-----Original Message-----

From: Steve Sutherland [mailto:ssuther@ibm.net]
Sent: Friday, July 30, 1999 4:49 AM
To: dave@sq.com
Cc: John-Paul Gignac; Dale Wick
Subject: OpenGraphics/EPO Discussion Notes

Dave - attached please find the "Discussion Notes" document we talked about. This should provide enough information to set the stage for a "Brainstorming" session. Please let me know if you need any additional information on Your Expression or OpenGraphics/pixBANK before the meeting.

Thank's again for taking the time to meet for lunch yesterday - I enjoyed it!

Steve.

Stephen Sutherland
President & CEO
OpenGraphics Corporation
ssuther@ibm.net
Tel: 416-931-0931
Fax: 905-474-1717



**THIS IS EXHIBIT "B" TO THE
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Discussion Notes – EPO Website Concept

Based on the July 29th meeting with Dave Gurney, OpenGraphics Corporation has prepared these notes to highlight areas where it sees significant synergies between the vision of the EPO portal, and the internet-based products and services currently being readied for launch by OpenGraphics.

It is hoped that in August the parties will meet to further explore this potential in a "brainstorming" session leading to revisions to this document and, as appropriate, the definition of a partnership or other collaborative relationship. (It is important to note that it is not anticipated at this point that all of the below products and services would be launched at the outset – the details below are included for discussion purposes to illustrate the breadth of possibilities.)

This document is divided into four sections to facilitate discussion and review:

SECTION 1 – OpenGraphics Background and Competency

OpenGraphics was founded in the spring of 1999 by Steve Sutherland, Dale Wick and John-Paul Gignac. Steve had previously founded TrueSpectra Inc. in 1992 and was joined by Dale in 1993 and John-Paul in 1994. Together they were awarded a U.S. Patent for an advanced object-based graphics rendering architecture they invented at TrueSpectra which enables rich image and text composition both locally, and across the Internet. They also have extensive experience with Internet technologies (TrueSpectra's core products are all Internet-based) the Internet Imaging Protocol (IIP). Steve is Chairman of the IIP Initiative at the California-based Digital Imaging Group (DIG) where he was also a member of the DIG Board of Directors in 1998. Steve is a leading authority on Imaging and has made presentations worldwide to senior researchers at firms such as Agfa, Fujifilm, Intel, Kodak, Moore, Polaroid, Sony, and Xerox and to international standards groups such as the ISO JPEG 2000 committee. Steve was also elected in 1999 to the Canadian Board of Directors of the 1400 member Software and Information Industry Association.

Steve, Dale and John-Paul understand production-time critical systems. Steve is a Director of Your Expression, and lead its development team which deployed the first custom greeting card systems in the world in 1988. Fully integrated into the purpose-built Point-of-Sale system, Your Expression stores profitably produce customized greeting cards in high-rent retail locations. While at TrueSpectra, Dale and John-Paul built a high-quality color print-on-demand extension to the system in 1994-5 and since forming OpenGraphics earlier this year, are building the Internet operation for Your Expression. Prior to working with Your Expression, Steve developed one of the first PC-based desktop publishing systems which was particularly notable for the fact that Hewlett-Packard used this system to produce the vast majority of product and promotional literature for the LaserJet printer line in the mid to late 1980's.

In summary, Steve, Dale and John-Paul bring a very comprehensive skill-set to OpenGraphics including:

- A thorough understanding of key Internet technologies;
- A rare ability to complete mathematically-complex research and development;

- State of the art imaging and graphics skills;
- Hands-on experience in greeting card and desktop publishing businesses; and,
- A proven ability to work together as a team.

SECTION 2 – Greeting Cards for the EPO

OpenGraphics is currently building and will manage a website for Your Expression Personalized Greetings Inc. Your Expression is the original retailer of personalized greeting cards and stationery products in North America, having opened its first retail store offering exclusively personalized products over ten years ago. Conceptually, co-branding with Your Expression, and co-ordinating navigation style, would provide significant synergy and increase the profit potential for both parties.

Challenge:

- 1) Many sites on the web today offer free “e-greetings” – so the first challenge is to define a product that is clearly differentiated from these current offerings.
- 2) The second challenge is to define a business model which has a reasonable chance of producing profits – it appears to be unlikely that any of the current free e-greeting sites are covering their costs simply through advertising revenues.
- 3) A final challenge is to identify an appropriate vehicle with which to initially drive traffic to the site.

Response:

- 1) The Your Expression Internet personalized greeting card and stationery offerings will be differentiated in four ways:
 - I. *The cards will be offered in both formats* – fully electronic e-greetings and customized traditional cards. There are three reasons why customized traditional cards are a big win for the site:
 - i. Many individuals are now turning to the Internet to save time – yet they would still like to send a traditional paper card, or must send a traditional card since the intended recipient does not have Internet access. The traditional cards offered on the Your Expression site will be the genuine article – they will be pre-printed on heavy stock with rich colors – and in the inside, an insert with the personalized text selected from the web will be attractively attached. This is a time-proven process for Your Expression as cards have been produced in this way since 1988, and customers return time and time again. Why would someone sending greeting cards go to an *only* e-greeting site when the Your Expression site is available offering *both* types of cards?
 - ii. The second reason is that with a traditional card, if the sender wishes it to be sent directly to the recipient, more detailed address information is required to be entered onto the website. It will be possible to store this information so if the sender wishes to send a card at a later date, there will be no need to lookup the address as it will already be online at Your Expression – this further encourages repeat business. Why would some-

one sending greeting cards go to another site if their address list is already on the Your Expression site?

- iii. The third reason is simply that customers will expect to pay for traditional cards. Thus, the differentiation that from the Your Expression site users can order traditional cards is also a huge win in terms of profitability (see also point (2) below).
- II. *Your Expression has amassed over 2000 carefully categorized expressions* which are easier to navigate than competitive offerings. In particular, all Your Expression card expressions are coded by mood in addition to event. By employing such a categorization system, it will be easier for customers to navigate the expression database and in the future, when customers are encouraged to offer their expressions to enhance the site, it will be easier for an editor to include virtually all expressions submitted – encouraging more customer participation.
- III. *In conjunction with pixBANK (see SECTION 3 below), it will be easy for a customer to permanently store an important image and produce e-greetings including any part of such image.* None of the e-greeting sites are “paired” with truly permanent image storage – a key differentiator for events such as baby-showers and wedding anniversaries. Plus, with pixBANK, it will be possible to order an enlargement of any such image – ideal for larger events where such framed print may be given as a gift.
- IV. *In conjunction with the advanced on-line image composition capabilities of OpenGraphics (see SECTION 4 below), for the more adventurous there will be an unparalleled capability to create the entire set of graphics for the e-greetings.* Coupled with the large-format output capability of the OpenGraphics architecture, this has interesting implications for corporate customers who could now produce invitations and signage for corporate events such as in-house seminars and parties. The ability to truly design online is not part of any competing e-greeting site!
- 2) Rather than relying on advertising revenues to fund the site, the success of the business model revolves around the ability to of the site to encourage customers to send personalized traditional greeting cards and stationery, to store images at pixBANK and order reprints, and to create compositions and order prints at OpenGraphics. The focus revolves around communications – using both electronic messages and printed products to enhance communications – not positioning the site as an alternative to a printing facility. This same approach was successfully used in the Your Expression retail locations, where the stores are clearly about cards and greetings, yet their highest-margin products are actually the custom-print derived personalized cards and invitations. If 90% of the cards are e-greetings, the remaining 10% of traditionally delivered cards will fund the operation.
- 3) Bringing the initial traffic to the site is clearly where the EPO concept has its greatest value. As potential EPO customers visit the site to explore bill payment options, they will encounter the additional OpenGraphics, Your Expression, and pixBANK products and services. All products are designed to encourage repeat visits, so once having been discovered, each will become added incentives for this initial “bill browsing” traffic to return regularly.

SECTION 3 – pixBANK Long Term Image Storage

It is beyond the scope of this document at this stage to go into the full details of the pixBANK operation and business models. However, three key elements leading to significant synergies between the EPO and pixBANK are listed below for further discussion:

a) The concept of Permanence – one permanent email address augmented by one permanent repository of all most treasured images:

It has been repeatedly observed that when a house starts to burn or if a flood is forecast or hurricane is set to touch down, among the first items ever removed from a house for safekeeping are the photo albums. EPO's concept of a permanent email address is complemented by pixBANK's concept of permanent storage for images. PixBANK has an added feature that users can download images in a number of formats, irrespective of what format the original was uploaded as – this means that in the future, pixBANK customers will always have access to their images even when file-format technologies change!

Especially when looking into the future a few years when digital cameras become as commonplace as video cameras are today, and bandwidth grows rapidly, many email greetings will include images. Recently, a digital camera with integrated cell phone was introduced in Japan – boasting that you could take pictures while traveling and send them home to family. With pixBANK, it will be a simple matter to select your favorites and ensure that they will never be lost.

b) The concept of Communities – sharing images among close groups:

Besides offering long-term (25 year or 100 year options) image storage, once at pixBANK, any image may be shared in a number of ways. Customers may place images in public folders with appropriate keywords to facilitate complex searches, or they may keep an image totally private. An additional option makes it easy for a customer to set up a folder which may be shared with family members or other identified individuals. For example, say a 50th wedding anniversary was held and all invited guests (invitations sent out through Your Expression/EPO online) were added to a private group with access to a special 50th wedding folder where they could all check in their favorite pictures – this would become an online photo album all guests could enjoy!

The synergy with EPO gets stronger when looking at implementation – each EPO email id could automatically be given a private folder for images at pixBANK. When any such user wished to create a folder to be shared by a close group, he/she would simply invite members of the group to sign-up at EPO for email id's. The user would then be able to add these email id's to the list of permitted viewers of the group folder. Two things are accomplished here – firstly, the original user has now got a specific reason to invite others to the EPO to get their id's; and secondly, these newly invited visitors to the EPO site will likely browse around and use other EPO services. Essentially, an interest in sharing images becomes a significant growth opportunity for the EPO.

c) Cross promotion opportunities – visit the EPO and store an image for life:

pixBANK will price 25 year image storage at \$25.00 and 100 year image storage at \$50.00. This is designed such that pixBANK can afford to give at least one long-term image storage away for every long-term storage purchase. Thus, there are opportunities to use pixBANK to help promote the use of the EPO.

SECTION 4 – OpenGraphics Online Creative Composition

Ultimately, the OpenGraphics site will be used much as desktop applications are used today to edit images and build graphic composition. A natural extension of today's e-greetings will be personally-designed greetings in the future and with the number and variety of devices that will connect individuals with the internet expected to vastly expand in the coming years, it is increasingly likely that a server-based, browser-delivered imaging environment will prevail over desktop applications.

Compositions built on the OpenGraphics site will be resolution-independent and will thus scale from e-greeting size all the way up to poster size. OpenGraphics users will be able to design not only cards, but invitations, thank-you notes, tributes, calendars, posters, and much more. Revenue from printed copies of these is projected to be more than enough to offset those who simply use the capability to create free e-greetings. Plus, once a composition has been created, it can be saved in editable form on pixBANK, generating further site revenues.

Summary

OpenGraphics believes that there are plenty of unique opportunities to work with the EPO to establish an exciting and profitable website. In these discussion notes, OpenGraphics has only detailed selected key points and would enjoy the opportunity to discuss the salient issues with representatives working on the EPO site. Please don't hesitate to contact Steve Sutherland at 416-931-0931 to clarify any information in these notes in the interim.

OpenGraphics Corporation
89 Sciberras Road
Markham, Ontario
L3R 2J5

**THIS IS EXHIBIT "C" TO THE
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A handwritten signature in black ink, appearing to read "Ali S.", is written over a horizontal line.

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dirlist.txt

Volume in drive H is USERS
Volume Serial Number is 0A67-0105

Directory of H:\bestbuy\pixbank

11/17/2005	04:08p	<DIR>	.
11/17/2005	04:08p	<DIR>	..
08/10/1999	08:46p		2,295 badupload.php3
08/10/1999	08:46p		3,061 browse.php3
08/10/1999	08:46p		4,555 browsefolder.php3
08/10/1999	08:46p		4,945 category.php3
08/10/1999	08:46p		4,585 credit.php3
08/10/1999	08:45p		1,639 deletefolder.php3
08/10/1999	08:46p		2,546 feedback.php3
08/10/1999	08:45p		6,834 folder.php3
08/10/1999	08:46p		2,022 folderprops.php3
08/10/1999	08:45p		6,973 folders.php3
08/10/1999	08:46p		2,939 goodupload.php3
08/10/1999	08:46p		4,090 groupfolder.php3
08/10/1999	08:46p		6,383 grpimage.php3
08/10/1999	08:46p		4,254 grpthumbs.php3
08/10/1999	08:46p		4,251 grpviewer.php3
08/10/1999	08:45p		6,137 image.php3
08/10/1999	08:46p		7,686 imageprops.php3
08/10/1999	08:45p		3,735 imageviewer.php3
08/10/1999	08:45p		2,468 index.php3
08/10/1999	08:45p		1,580 logout.php3
08/11/1999	10:32a		1,439 moveimage.php3
08/10/1999	08:45p		1,783 newfolder.php3
08/10/1999	08:46p		2,939 owner.php3
08/10/1999	08:46p		6,202 pubimage.php3
08/10/1999	08:46p		1,231 pubthumbs.php3
08/10/1999	08:46p		1,228 pubviewer.php3
08/10/1999	08:45p		5,009 receiver.php3
08/10/1999	08:46p		8,443 receiver2.php3
08/10/1999	08:45p		2,582 renamefolder.php3
08/10/1999	08:45p		2,071 renameimage.php3
08/10/1999	08:46p		8,306 search.php3
08/10/1999	08:46p		473 sendfeedback.php3
08/10/1999	08:46p		3,956 sendimage.php3
08/10/1999	08:46p		445 senduploadproblem.php3
08/10/1999	08:45p		3,128 signup.php3
08/10/1999	08:45p		6,532 signup2.php3
08/10/1999	08:45p		6,098 signup3.php3
08/10/1999	08:45p		5,881 signup4.php3
08/10/1999	08:45p		4,815 signup5.php3
08/10/1999	08:45p		123 test.php3
08/10/1999	08:45p		3,715 thumbviewer.php3
08/10/1999	08:46p		4,708 updateimageprops.php3
08/10/1999	08:45p		5,666 upload.php3
08/10/1999	08:46p		2,431 uploadproblem.php3
11/17/2005	04:08p	<DIR>	design
11/17/2005	04:08p	<DIR>	images
11/17/2005	04:08p	<DIR>	php-include
		44 File(s)	172,182 bytes

Directory of H:\bestbuy\pixbank\design

11/17/2005	04:08p	<DIR>	.
11/17/2005	04:08p	<DIR>	..
08/10/1999	08:45p		14,216 index.html
		1 File(s)	14,216 bytes

dirlist.txt

Directory of H:\bestbuy\pixbank\images

```

11/17/2005 04:08p <DIR> .
11/17/2005 04:08p <DIR> ..
08/10/1999 08:45p      1,119 foo.gif
08/10/1999 08:45p      1,186 logo.gif
08/10/1999 08:45p    19,612 logo.xcf
08/10/1999 08:45p      1,275 top-bar.gif
08/10/1999 08:45p      6,971 top-bar.xcf
08/10/1999 08:45p      444 top-left-bar.gif
08/10/1999 08:45p    11,472 top-left.xcf
08/10/1999 08:45p      2,391 top.gif
08/10/1999 08:45p    28,823 top.xcf
          9 File(s)      73,293 bytes

```

Directory of H:\bestbuy\pixbank\php-include

```

11/17/2005 04:08p <DIR> .
11/17/2005 04:08p <DIR> ..
08/10/1999 08:45p      4,670 auth.inc
08/10/1999 08:45p      2,456 cart.inc
08/10/1999 08:45p      2,857 crloginform.ihtml
08/10/1999 08:45p        999 csv_table.inc
08/10/1999 08:45p      3,250 db_mysql.inc
08/10/1999 08:45p      4,103 db_odbc.inc
08/10/1999 08:45p      4,346 db_oracle.inc
08/10/1999 08:45p      3,137 db_pgsql.inc
08/10/1999 08:45p      3,103 db_sybase.inc
08/10/1999 08:45p      9,498 graph.inc
08/10/1999 08:45p      2,286 local.inc
08/10/1999 08:45p      2,281 loginform.ihtml
08/10/1999 08:45p      1,713 of_checkbox.inc
08/10/1999 08:45p        539 of_file.inc
08/10/1999 08:45p      1,432 of_radio.inc
08/10/1999 08:45p      2,486 of_select.inc
08/10/1999 08:45p      2,428 of_text.inc
08/10/1999 08:45p        882 of_textarea.inc
08/10/1999 08:45p      6,408 oohforms.inc
08/10/1999 08:45p      4,371 orig.local.inc
08/10/1999 08:45p      1,777 page.inc
08/10/1999 08:45p      1,992 perm.inc
08/10/1999 08:45p        624 perminvalid.ihtml
08/10/1999 08:45p        958 prepend.php3
08/10/1999 08:45p     12,204 session.inc
08/10/1999 08:45p      8,419 sqlquery.inc
08/10/1999 08:45p      2,261 strings2.inc
08/10/1999 08:45p      6,405 table.inc
08/10/1999 08:45p      5,873 tree.inc
08/10/1999 08:45p      2,021 user.inc
          30 File(s)    105,779 bytes

```

Total Files Listed:
 84 File(s) 365,470 bytes
 11 Dir(s) 12,162,007,040 bytes free

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A handwritten signature in black ink, appearing to be "Alvin R.", is written over a horizontal line.

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groupfolder.php3:

```
<? $globalloc = "php-include/";
include( $globalloc."prepend.php3");
?><?
function htmlwrap( $str)
{
    return ereg_replace( "<", "&lt;",
        ereg_replace( ">", "&gt;",
            ereg_replace( "\"", "&quot;",
                ereg_replace( "&", "&amp;", $str))));
}
?>
<?
    page_open( array( "sess" => "Poe_Session",
        "auth" => "Poe_Auth"));
    $username = $auth->auth["uname"];
?>
<html>
<head>
<title>Folder Contents</title>
</head>
<body bgcolor="#000000" topmargin="0" leftmargin="0" marginwidth="0"
marginheight="0" text="#d0d0d0" link="#a0a0a0" vlink="#a0a0a0">
<table width="100%" height="100%" border="0" cellspacing="0"
cellpadding="0">
<tr><td colspan="2" background="images/top-bar.gif"></td>
</tr>
<tr><td height="100%" bgcolor="#400080" valign="top">
<table border="0" cellpadding="10" cellspacing="0"><tr><td>
<p><a href="">Main&nbsp;&nbsp;Page</a>
<p><a href="feedback.php3">Feedback</a>
<p><a href="search.php3">Search</a>
<p><a href="browse.php3">Browse&nbsp;&nbsp;Images</a>
<p><a href="folders.php3">My&nbsp;&nbsp;Folders</a>
<p><a href="logout.php3">Log&nbsp;&nbsp;Out</a>
<p><a href="upload.php3">Upload&nbsp;&nbsp;An&nbsp;&nbsp;Image</a>
<p><a href="groups.php3">Groups</a>
</td></tr></table>
</td><td width="100%" valign="top">
<table border="0" cellpadding="10" cellspacing="0" width="100%">
<tr><td align="center">
<table border="0" width="100%" height="100%">
<tr><td width="100%" align="center" valign="top"><br>
<?

function show_images( $images, $title, $empty_msg,
    $viewer, $thumbviewer, $retaddr, $retname)
{
    $numimages = sizeof($images);

    if( $numimages > 0) {
        $maxcols = 4;
        $columns = $numimages > $maxcols ? $maxcols : $numimages;
        $percent = intval( 100.0 / $columns);
        $column = 0;

        print "<h3>$title</h3>";
        print "<table border=\"0\" cellpadding=\"0\" cellspacing=
\"20\">\n";
```

```

for( $i = 0; $i < $numimages; $i++)
{
    if( $column == 0) {
        print "<tr>";
    }
    print "<td width=\"\$percent%\" valign=\"top\">\n";

    print "<table border=\"0\" cellspacing=\"0\"".
        " cellpadding=\"0\" width=\"100%\"><tr>";
    print "<td align=\"center\">\n";

    $id = $images[$i]["value"];
    $imagename = $images[$i]["label"];
    if( $imagename == '') $imagename = '(no name)';

    $viewpage="$viewer?id=$id&retaddr=".urlencode
($retaddr).
        "&retname=".urlencode($retname);
    print "<a href=\"\$viewpage\">";
    print "<img src=\"\$thumbviewer?id=$id\"".
        " width=64 height=64 alt=\"\" border=0></a>";
    print "</td></tr><tr><td align=center>";
    print "<a href=\"\$viewpage\">$imagename</a>";

    print "</td></tr></table></a>";
    print "</td>\n";

    $column ++;
    if( $column == $columns) {
        $column = 0;
        print "</tr>";
    }
}

if( $column != 0) {
    print "<td colspan=\".($columns - $column).\">&nbsp;";
</td></tr>";
}

print "</table>";
} else {
    print "<h3>$empty_msg</h3>";
}
}

?>
<?

$db = new DB_pixBANK;

require( $globalloc."oohforms.inc");

$username = $auth->auth("uname");

$folder = intval( $folder);

$db->query( "select folders.name from folders,group_members where
".
    "folders.group_ = group_members.id and ".
    "group_members.username = '".AddSlashes( $username)."' and
".

```



```

        "folders.id=$folder");
if( !$db->next_record()) {
    print "<h3>The selected folder does not exist.</h3>";
    exit(1);
}

$foldername = htmlwrap($db->f("name"));

$db->query( "select id,name from grpimages where ".
    "username='".AddSlashes( $username)."' ".
    "and folder=$folder order by name");

$images = array();
while( $db->next_record())
{
    $images[] = array(
        "label"=>htmlwrap($db->f("name")),
        "value"=>$db->f("id"));
}
?>
<?
    show_images( $images,
        "Contents of folder \"$foldername\":",
        "Folder \"$foldername\" is empty.",
        "grpimage.php3","grpthumbs.php3",
        "groupfolder.php3?folder=$folder","Image List");

    print "\n<a href=\"folders.php3\">Return to Folder List</a>\n";
?>
</td><td valign="top"> <hr>
    <div align="center">
        <p><a href="upload.php3">Upload an Image</a>
    </div>
<br><hr></td></tr></table>
</td></tr></table>
</body>
<?
    page_close();
?>

```

**THIS IS EXHIBIT "E" TO THE
AFFIDAVIT OF STEPHEN B. SUTHERLAND AND DALE M. WICK
SWORN THIS 13TH DAY OF DECEMBER, 2005**

A handwritten signature in cursive script, appearing to read "Ali Rame", is written over a horizontal line.

**A Notary Public or Commissioner
for the Taking of Oaths**

grpimage.php3:

```
<? $globalloc = "php-include/";
include( $globalloc."prepend.php3");
?><?
function htmlwrap( $str)
{
    return ereg_replace( "<", "&lt;",
        ereg_replace( ">", "&gt;",
            ereg_replace( "\"", "&quot;",
                ereg_replace( "&", "&amp;", $str))));
}
?>
<?
    page_open( array( "sess" => "Poe_Session",
        "auth" => "Poe_Auth"));
    $username = $auth->auth["uname"];
?>
<html>
<head>
<title>Image Viewer</title>
</head>
<body bgcolor="#000000" topmargin="0" leftmargin="0" marginwidth="0"
marginheight="0" text="#d0d0d0" link="#a0a0a0" vlink="#a0a0a0">
<table width="100%" height="100%" border="0" cellspacing="0"
cellpadding="0">
<tr><td colspan="2" background="images/top-bar.gif"></td>
</tr>
<tr><td height="100%" bgcolor="#400080" valign="top">
<table border="0" cellpadding="10" cellspacing="0"><tr><td>
<p><a href="">Main&nbsp;&nbsp;&nbsp;Page</a>
<p><a href="feedback.php3">Feedback</a>
<p><a href="search.php3">Search</a>
<p><a href="browse.php3">Browse&nbsp;&nbsp;&nbsp;Images</a>
<p><a href="folders.php3">My&nbsp;&nbsp;&nbsp;Folders</a>
<p><a href="logout.php3">Log&nbsp;&nbsp;&nbsp;Out</a>
<p><a href="upload.php3">Upload&nbsp;&nbsp;&nbsp;An&nbsp;&nbsp;&nbsp;Image</a>
<p><a href="groups.php3">Groups</a>
</td></tr></table>
</td><td width="100%" valign="top">
<table border="0" cellpadding="10" cellspacing="0" width="100%">
<tr><td align="center">
<table border="0" width="100%" height="100%">
<tr><td width="100%" align="center" valign="top"><br>
<?

function is_owner( $image_id, $username)
{
    $db = new DB_pixBANK;

    $db->query( "select id from imagedata where id = $image_id ".
        "and owner = '$username'");
    return $db->next_record();
}

function get_access( $image_id)
{
    $db = new DB_pixBANK;

    $db->query( "select access from pubimages where id = $image_id");
```

```

        if( !$db->next_record()) return 1;
        return $db->f("access");
    }

function get_grp_access( $image_id, $username)
{
    $db = new DB_pixBANK;

    $db->query( "select grp_access from grpimages where id = $image_id
    ".
        "and username = '$username'");
    if( !$db->next_record()) return 1;
    return $db->f("grp_access");
}

?>
<?
function image_filename( $prefix, $id)
{
    return $prefix."/".ereg_replace( "([1-9a-f])", "/\\1",
        sprintf( "%08x", $id));
}

?>
<?
function parse_keywords( $keywords_string)
{
    $keywords = ereg_replace( "^","'", ereg_replace( ",$", "'",
        ereg_replace( ",,*","'", ereg_replace( "[^a-z0-9,]", "'",
        ereg_replace( "[ ;]", "'", strtolower( $keywords_string))));
    if( $keywords == "") return array();
    return explode( "'", $keywords);
}

function keyword_search( $keywords_string)
{
    $keywords = parse_keywords( $keywords_string);
    $images = array();
    $found = array();

    $db = new DB_pixBANK;

    for( $i=0; $i < sizeof($keywords); $i++)
    {
        $db->query( "select image from keywords where word='".
            addslashes($keywords[$i])."'");

        while( $db->next_record()) {
            $id = $db->f("image");
            if( !$found[$id]) {
                $images[] = $id;
                $found[$id] = 1;
            }
        }
    }

    return $images;
}

function get_keywords( $db, $image)
{
    $keywords = array();

```

```

    $db->query( "select word from keywords where image=$image");
    while( $db->next_record() ) {
        $keywords[] = htmlentities($db->f("word"));
    }
    return implode( $keywords, " ");
}

// ONLY CALL WITHIN A TRANSACTION
function set_keywords( $db, $image, $keywords_string)
{
    $db->query( "delete from keywords where image=$image");
    $keywords = parse_keywords( $keywords_string);
    for( $i=0; $i < sizeof( $keywords); $i++) {
        $db->query( "insert into keywords (word,image) values ('".
            AddSlashes($keywords[$i])."', $image)");
    }
}
?>
<?

$db = new DB_pixBANK;

require( $globalloc."oohforms.inc");

$id = intval( $id);
$username = $auth->auth["uname"];
?>
<?

if( get_grp_access( $id, $username) < 2) exit(1);

$db->query( "select * from imagedata where id=$id");
if( !$db->next_record()) exit(1);

$folder = $db->f("folder");
$name = $db->f("name");
$owner = $db->f("owner");
$category = $db->f("category");
$creation_date = $db->f("creation_date");
$upload_date = $db->f("upload_date");
$access = $db->f("access");
$expiry_date = $db->f("expiry_date");
$description = $db->f("description");

$db->query( "select given_names,last_name from members where ".
    "username='".AddSlashes($owner)."'");
if( !$db->next_record()) exit(1);
$owner = $db->f("given_names")." ".$db->f("last_name");

$keywords = get_keywords( $db, $id);

$db->query( "select * from categories where id=$category");
$db->next_record();
$category = $db->f( "name");

$db->query( "select description from access_levels where id=
$access");
$db->next_record();
$access = $db->f( "description");

if( $creation_date == '') {
    $creation_date = 'unknown';
} else {

```

```

        $creation_date = substr( $creation_date, 4, 4).
        intval( substr( $creation_date, 8, 2)).", ".
        intval( substr( $creation_date, 20));
    }

    $upload_date = substr( $upload_date, 4, 4).
    intval( substr( $upload_date, 8, 2)).", ".
    intval( substr( $upload_date, 20));

    $expiry_date = substr( $expiry_date, 4, 4).
    intval( substr( $expiry_date, 8, 2)).", ".
    intval( substr( $expiry_date, 20));

    print "<img src=\"grpviewer.php3?id=$id\"><br>";

    $pre = "<tr><td align=\"right\" valign=\"top\">".
    "<font face=\"helvetica\"><b>";
    $mid = "</b></font></td><td><font face=\"helvetica\">";
    $post = "</font></td></tr>\n";

    print "<p><table border=\"0\" cellpadding=\"0\" cellspacing=\"8
\">";
    print "${pre}Image Name:$mid".htmlwrap( $name).$post;
    print "${pre}Owner:$mid".htmlwrap( $owner).$post;
    print "${pre}Category:$mid".htmlwrap( $category).$post;
    print "${pre}Creation Date:$mid".htmlwrap( $creation_date).$post;
    print "${pre}Upload Date:$mid".htmlwrap( $upload_date).$post;
    print "${pre}Access Level:$mid".htmlwrap( $access).$post;
    print "${pre}Storage Expiry Date:$mid".htmlwrap( $expiry_date).
$post;
    print "${pre}Keywords:$mid".htmlwrap( $keywords).$post;
    print "${pre}Description:$mid".htmlwrap( $description).$post;
    print "</table>";

    print "<p><a href=\"$retaddr\">Return to ".
    htmlwrap( $retname). "</a>";

    ?>
</td><td valign="top"> <hr>
    <div align="center">
        <p><? print "<a href=\"sendimage.php3?\".
        "id=$id\">Send&nbsp;This&nbsp;Image to&nbsp;a&nbsp;Friend
</a>"; ?><br>
        <p><? print "<a href=\"download.php3?\".
        "id=$id\">Download This&nbsp;Image
</a>"; ?><br>
    </div>
<br><hr></td></tr></table>
</td></tr></table>
</td></tr></table>
</body>
<?
    page_close();
?>

```

**THIS IS EXHIBIT "F" TO THE
AFFIDAVIT OF STEPHEN B. SUTHERLAND AND DALE M. WICK
SWORN THIS 13TH DAY OF DECEMBER, 2005**

A handwritten signature in cursive script, appearing to read "C. Allen", is written over a horizontal line.

**A Notary Public or Commissioner
for the Taking of Oaths**

grpthumbs.php3:

```
<? $globalloc = "php-include/";
include( $globalloc."prepend.php3");
?><?
function htmlwrap( $str)
{
    return ereg_replace( "<", "&lt;",
        ereg_replace( ">", "&gt;",
            ereg_replace( "\"", "&quot;",
                ereg_replace( "&", "&amp;", $str))));
}
?>
<?

// This function returns a shell command which outputs the given
// image in PPM format to stdout.  On failure it returns false.

function converttoppm( $source)
{
    return "convert -comment ' ' $source pnm:-";
}

// This function returns a two-element array describing the resolution
// of the given image.  On failure it returns false.

function imageres( $source)
{
    $cmd = converttoppm( $source);
    if( !$cmd) return false;

    $fd = popen( $cmd, "r");
    if( !$fd) return false;

    if( !fgets( $fd, 1000)) {
        pclose( $fd);
        return false;
    }

    $resline = fgets( $fd, 1000);
    if( pclose( $fd)) return false;
    if( !$resline) return false;

    return explode( " ", chop( $resline));
}

// Generates a $maxsize x $maxsize thumbnail, which is the original
// image aspect ratio, but padded either vertically or horizontally
// with black pixels.  The resulting image is in JPEG format.
// Returns true on success or false on failure.
function generate_thumbnail( $source, $target, $maxsize)
{
    // Error handling could be improved.

    $res = imageres( $source);
    if( !$res) return false;

    $width = $res[0];
    $height = $res[1];

    $cmd = converttoppm( $source);
```



```

    if( !$cmd) return false;

    $ppmname = tempnam( "/tmp", "ppmthum");
    if( !$ppmname) return false;

    if( $width > $maxsize || $height > $maxsize) {
        if( $width > $height) {
            exec( "$cmd | pnmscale -width $maxsize > $ppmname",
$a, $src);
        } else {
            exec( "$cmd | pnmscale -height $maxsize > $ppmname",
$a, $src);
        }
    } else {
        exec( "$cmd > $ppmname", $a, $src);
    }

    if( $src) {
        unlink( $ppmname);
        return false;
    }

    $size = explode( " ", exec("head -2 $ppmname"));
    $width = $size[0];
    $lpad = intval(($maxsize - $width) / 2);
    $rpad = ($maxsize - $lpad - $width);
    $height = $size[1];
    $tpad = intval(($maxsize - $height) / 2);
    $bpad = ($maxsize - $tpad - $height);

    exec( "pnmpad -black -l$lpad -r$rpad -t$tpad -b$bpad $ppmname".
" | cjpeg -outfile $target", $a, $src);
    unlink( $ppmname);

    if( $src) {
        unlink( $target);
        return false;
    }

    return true;
}

// Generates a JPEG of the given source image, retaining the original
// aspect ratio. If either edge length is greater than $maxsize then it
// will be scaled down so that at least one of the edges is that length,
// and the other is at most that length.
// Returns true on success or false on failure.
function generate_image( $source, $target, $maxsize)
{
    // Error handling could be improved.

    $res = imageres( $source);
    if( !$res) return false;

    $width = $res[0];
    $height = $res[1];

    $cmd = converttoppm( $source);
    if( !$cmd) return false;

    if( $width > $height) {

```

```

        if( $width > $maxsize) {
            $cmd = "$cmd | pnmscale -width $maxsize";
        }
    } else {
        if( $height > $maxsize) {
            $cmd = "$cmd | pnmscale -height $maxsize";
        }
    }

    exec( "$cmd | cjpeg -outfile $target", $a, $rc);

    if( $rc) {
        unlink( $target);
        return false;
    }

    return true;
}

?>
<?
function image_filename( $prefix, $id)
{
    return $prefix."/".ereg_replace( "[1-9a-f]", "/\\1",
        sprintf( "%08x", $id));
}
?>
<?

function is_owner( $image_id, $username)
{
    $db = new DB_pixBANK;

    $db->query( "select id from imagedata where id = $image_id ".
        "and owner = '$username'");
    return $db->next_record();
}

function get_access( $image_id)
{
    $db = new DB_pixBANK;

    $db->query( "select access from pubimages where id = $image_id");
    if( !$db->next_record()) return 1;
    return $db->f("access");
}

function get_grp_access( $image_id, $username)
{
    $db = new DB_pixBANK;

    $db->query( "select grp_access from grpimages where id = $image_id
        "
        "and username = '$username'");
    if( !$db->next_record()) return 1;
    return $db->f("grp_access");
}

?>
<?
page_open( array( "sess" => "Poe_Session",

```

```
        "auth" => "Poe_Auth")));

header( "Content-type: image/gif");

$username = $auth->auth["uname"];
$id = intval( $id);

if( get_grp_access( $id, $username) < 2) exit(1);

$filename = image_filename( "/tmp/pixBANK-images", $id);
readfile( "$filename-thumbnail");

page_close();

?>
```

**THIS IS EXHIBIT "G" TO THE
AFFIDAVIT OF STEPHEN B. SUTHERLAND AND DALE M. WICK
SWORN THIS 13TH DAY OF DECEMBER, 2005**

**A Notary Public or Commissioner
for the Taking of Oaths**

grpviewer.php3:

```
<? $globalloc = "php-include/";
include( $globalloc."prepend.php3");
?><?
function htmlwrap( $str)
{
    return ereg_replace( "<", "&lt;",
        ereg_replace( ">", "&gt;",
            ereg_replace( "\"", "&quot;",
                ereg_replace( "&", "&amp;", $str))));
}
?>
<?

// This function returns a shell command which outputs the given
// image in PPM format to stdout.  On failure it returns false.

function converttoppm( $source)
{
    return "convert -comment ' ' $source pnm:-";
}

// This function returns a two-element array describing the resolution
// of the given image.  On failure it returns false.

function imageres( $source)
{
    $cmd = converttoppm( $source);
    if( !$cmd) return false;

    $fd = popen( $cmd, "r");
    if( !$fd) return false;

    if( !fgets( $fd, 1000)) {
        pclose( $fd);
        return false;
    }

    $resline = fgets( $fd, 1000);
    if( pclose( $fd)) return false;
    if( !$resline) return false;

    return explode( " ", chop( $resline));
}

// Generates a $maxsize x $maxsize thumbnail, which is the original
// image aspect ratio, but padded either vertically or horizontally
// with black pixels.  The resulting image is in JPEG format.
// Returns true on success or false on failure.
function generate_thumbnail( $source, $target, $maxsize)
{
    // Error handling could be improved.

    $res = imageres( $source);
    if( !$res) return false;

    $width = $res[0];
    $height = $res[1];

    $cmd = converttoppm( $source);
```

```

    if( !$cmd) return false;

    $ppmname = tempnam( "/tmp", "ppmthum");
    if( !$ppmname) return false;

    if( $width > $maxsize || $height > $maxsize) {
        if( $width > $height) {
            exec( "$cmd | pnmscale -width $maxsize > $ppmname",
$sa, $src);
        } else {
            exec( "$cmd | pnmscale -height $maxsize > $ppmname",
$sa, $src);
        }
    } else {
        exec( "$cmd > $ppmname", $sa, $src);
    }

    if( $src) {
        unlink( $ppmname);
        return false;
    }

    $size = explode( " ", exec("head -2 $ppmname"));
    $width = $size[0];
    $lpad = intval(($maxsize - $width) / 2);
    $rpad = ($maxsize - $lpad - $width);
    $height = $size[1];
    $tpad = intval(($maxsize - $height) / 2);
    $bpad = ($maxsize - $tpad - $height);

    exec( "pnmpad -black -l$lpad -r$rpad -t$tpad -b$bpad $ppmname".
        " | cjpeg -outfile $target", $sa, $src);
    unlink( $ppmname);

    if( $src) {
        unlink( $target);
        return false;
    }

    return true;
}

// Generates a JPEG of the given source image, retaining the original
// aspect ratio. If either edge length is greater than $maxsize then it
// will be scaled down so that at least one of the edges is that length,
// and the other is at most that length.
// Returns true on success or false on failure.
function generate_image( $source, $target, $maxsize)
{
    // Error handling could be improved.

    $res = imageres( $source);
    if( !$res) return false;

    $width = $res[0];
    $height = $res[1];

    $cmd = converttoppm( $source);
    if( !$cmd) return false;

    if( $width > $height) {

```

```

        if( $width > $maxsize) {
            $cmd = "$cmd | pnmscale -width $maxsize";
        }
    } else {
        if( $height > $maxsize) {
            $cmd = "$cmd | pnmscale -height $maxsize";
        }
    }

    exec( "$cmd | cjpeg -outfile $target", $a, $rc);

    if( $rc) {
        unlink( $target);
        return false;
    }

    return true;
}

?>
<?
function image_filename( $prefix, $id)
{
    return $prefix."/".ereg_replace( "[1-9a-f]", "/\\1",
        sprintf( "%08x", $id));
}
?>
<?

function is_owner( $image_id, $username)
{
    $db = new DB_pixBANK;

    $db->query( "select id from imagedata where id = $image_id ".
        "and owner = '$username'");
    return $db->next_record();
}

function get_access( $image_id)
{
    $db = new DB_pixBANK;

    $db->query( "select access from pubimages where id = $image_id");
    if( !$db->next_record()) return 1;
    return $db->f("access");
}

function get_grp_access( $image_id, $username)
{
    $db = new DB_pixBANK;

    $db->query( "select grp_access from grpimages where id = $image_id
    ".
        "and username = '$username'");
    if( !$db->next_record()) return 1;
    return $db->f("grp_access");
}

?>
<?
    page_open( array( "sess" => "Poe_Session",

```

```
"auth" => "Poe_Auth"));

$username = $auth->auth["uname"];
$id = intval( $id);

if( get_grp_access( $id, $username) < 2) exit(1);

header( "Content-type: image/gif");

$filename = image_filename( "/tmp/pixBANK-images", $id);
readfile( "$filename-medium");

page_close();

?>
```